Does This FizzBuzz?

DiPS CodeJam 24

Prompt

(from Wikipedia) Fizz buzz is a group word game for children to teach them about division. Players take turns to count incrementally, replacing any number divisible by three with the word "fizz", and any number divisible by five with the word "buzz", and any number divisible by both three and five with the word "fizzbuzz".

Given a string s, determine if the string is a substring of some valid generalised fizzbuzz – the factors are not 3 and 5. Tokens are completely covered (no half-words) and are space-separated.

Input Format

- The first and only line of the input contains a space-separated string s.

Output Format

The first and only line of your output must contain a single integer, 0 if the string is not valid FizzBuzz and 1 if the string is valid.

Constraints

- $10^4 \leq$ size of s $\leq 10^6$

- Assume that no string is purely comprised of alphabets (at least one number is present)

Sample Program

```python
def solve(arr):
  import math
  arr = arr.split()
  int_arr = []
  for i in arr:
    if i.isdigit():
      int_arr.append(int(i))
    else:
      int_arr.append(None)

  for i in range(len(int_arr)):
    if type(int_arr[i])==int:
      int_arr = list(range( int_arr[i]-i, int_arr[i]-i+len(int_arr) ))
      break

  fizz_terms = []
  buzz_terms = []

  for i in range(len(int_arr)):
```

```python
    if "Fizz" in arr[i]:
      fizz_terms.append(int_arr[i])
    if "Buzz" in arr[i]:
      buzz_terms.append(int_arr[i])

  if fizz_terms == buzz_terms == []:
    return True

  gcd_f, gcd_b = math.gcd(*fizz_terms), math.gcd(*buzz_terms)

  if gcd_f == 1 or gcd_b == 1:
    return False

  return True
```